

REMARKS

Claims 4-16 and 19-20 remain in the present application. Claims 1-3 and 17-18 are hereby canceled without prejudice. Claims 4, 10, 11, 12, and 19 are hereby amended. No new matter is being added.

Claim Rejections -- 35 USC 103

Claims 4-16 and 19-20 were rejected under 35 USC 103 as being unpatentable over Dotan (USP 6,407,373) in view of Veneklasen et al. (USP 6,610,980). Claims 4, 10, 11, 12, and 19 are hereby amended. This rejection is respectfully traversed in regards to the claims as amended.

As amended, claim 4 is now limited to the following.

4. An apparatus for inspection and review of a substrate, the apparatus comprising:
a first subsystem for inspecting said substrate;
a processor for identifying regions of said substrate for review; and
a second subsystem for reviewing at least a portion of said regions,
wherein both said first and second subsystems each comprises an
electron beam microscope,
wherein the inspection of the substrate is performed while the substrate is
on a continuously moving stage, and
wherein review images from said regions are grabbed "on the fly" by the
apparatus so as to avoid a need to relocate said regions.

As recited above, claim 4 now requires that "the inspection of the substrate is performed while the substrate is on a continuously moving stage." This limitation is supported by an embodiment described in the specification, for example, on page 4, lines 7-9, which recites as follows. "In another embodiment, the review subsystem 36 may perform the review of said identified regions (or portions thereof) with the substrate on a continuously moving stage."

Furthermore, claim 4 now also requires that "review images from said regions are grabbed on the fly by the apparatus so as to avoid a need to relocate said regions." This advantageously saves time and effort in the inspection process. This limitation is

supported in the specification, for example, on page 4, lines 9-12, which recites as follows. "In that embodiment, the review image data may be obtained 'on the fly' during inspection. If the review images are grabbed on the fly by the inspector, then there is no need to relocate the defect. This saves time and effort."

The Dotan reference does not appear to disclose or suggest that "the inspection of the substrate is performed while the substrate is on a continuously moving stage." Nor does Dotan appear to disclose or suggest that "review images from said regions are grabbed on the fly by the apparatus so as to avoid a need to relocate said regions.

On the contrary, Dotan discusses an apparatus as follows. "The optical microscope is used to redetect previously mapped defects on the object surface Once the defect has been redetected, a translation system moves the stage a predetermined displacement such that the defect is positioned for review by the SEM." (Dotan, Abstract.) In other words, Dotan is describing an operation that requires repositioning of the object in order to perform the review by the SEM. This teaches against grabbing the review image data "on the fly" during the inspection as recited in amended claim 4 of the present application.

Regarding Veneklasen et al., that reference relates to an apparatus where two flood beams are used to avoid charging effects upon insulating or partially insulating substrates. (Veneklasen et al., Abstract.) Veneklasen et al. does not appear to disclose or suggest an apparatus for both inspection and review, "wherein the inspection of the substrate is performed while the substrate is on a continuously moving stage." Nor does Veneklasen et al. appear to disclose or suggest the limitation that "review images from said regions are grabbed on the fly by the apparatus so as to avoid a need to relocate said regions."

For at least the above-discussed reasons, applicant respectfully submits that claim 4, as amended, is now patentably distinguished over Dotan in view of Veneklasen et al.

Claims 5-16 depend from claim 4. Hence, claims 5-16 are also now patentably distinguished over Dotan in view of Veneklasen et al. for at least the same reasons.

Similar to claim 4, claim 19 is amended and now recites that "the inspection of the substrate is performed while the substrate is on a continuously moving stage" and that "review images from said regions are grabbed on the fly by the apparatus so as to avoid a need to relocate said regions." Therefore, for similar reasons as discussed above in relation to claim 4, claim 19 is also now patentably distinguished over Dotan in view of Veneklasen et al. Claims 20 depends from claim 19. Hence, claims 20 is also now patentably distinguished over Dotan in view of Veneklasen et al. for at least the same reasons.

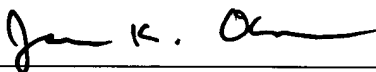
Conclusion

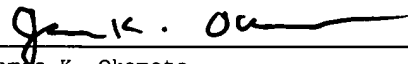
Claims 4-16 and 19-20, as amended, are now patentably distinct over the cited art. Favorable action is respectfully requested.

Respectfully submitted,
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